CLIPPEDIMAGE= JP404095408A

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TITLE: SEMICONDUCTOR DEVICE

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INVENTOR-INFORMATION:

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ABSTRACT:

PURPOSE: To set a current flowing in an operational amplifier to several-stage by providing plural constant current sources and a constant current source selection circuit into one semiconductor device.

CONSTITUTION: The semiconductor device is provided with a differential stage

 $101\ \mathrm{of}\ \mathrm{an}\ \mathrm{operational}\ \mathrm{amplifier},\ \mathrm{PMOS}\ \mathrm{switches}\ 104,\ 105\ \mathrm{to}\ \mathrm{select}\ \mathrm{the}\ \mathrm{supply}\ \mathrm{of}$

a current to a constant current source, differential stage constant current

sources 106, 107 to supply a current to the differential stage, an operational

amplifier differential amplifier stage 108 to amplify a voltage difference

between a noninverting input 109 and an inverting input 110, constant current

source selection registers 111, 112 to latch a signal to select the constant

current sources 106, 107, an operational amplifier output stage outputting an

output from the differential stage externally and an output stage constant

current source 114 to set a current consumption of the output stage. Then the

current consumption in the differential stage is selected by writing